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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,151	04/18/2001	Paul E. Bender	QCPA655C1B1	7745

23696 7590 08/20/2004

Qualcomm Incorporated
Patents Department
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EXAMINER	
KADING, JOSHUA A	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/837,151	BENDER ET AL.	
	Examiner	Art Unit	
	Joshua Kading	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 18 April 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/30/01, 1/2/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 4, 5, 8, and 9 objected to because of the following informalities:

Claim 4, line 3; claim 8, line 3; and claim 9, line 3 all state "plurality of network access point". This should be changed to --plurality of network access points-- in claims 4, 8, and 9.

Claim 5, line 3 states "a plurality of routers". Since this is the second disclosure of "a plurality of routers" (the first being in claim 1, line 4) and there are further references made to "said plurality of routers" later in claim 5, it is suggested line 3 of claim 5 be changed to --said plurality of routers-- or --the plurality of routers--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-9, 11, and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamm et al. (U.S. Patent 5,457,680).

Regarding claim 11, Kamm discloses "a wireless data communication system apparatus, comprising:

a plurality of routers (figure 1, elements 102 and 104 where the gateways serve the same function as routers by routing data on to its respective destination, as can be seen in figure 1B with the more detailed drawing of the gateways of figure 1);

a plurality of network access points (figure 1, where the MDBS units in the all the cells act as access points to the network since they are the first point at which data is transferred for transmission to the network), each of said plurality of network access points being configured to:

communicate with at least two of said plurality of routers (figure 1, elements 102 and 104 where the gateways serve the same function as routers by routing data onto its respective destination, as can be seen in figure 1B with the more detailed drawing of the gateways of figure 1 where the routing tables indicate the routing function); and

communicate with at least one remote user (figure 1, elements SU1, SU2, and SU3 are all remote users in communication with the access point);

a plurality of control points (col. 12, lines 26-30 where each MDBS has a controller in it), each of said plurality of control points being associated with one of said plurality of network access points (figure 1 where each MDBS is associated with only one cell and therefore only one access point)."

Although claims 1 and 7 are broader than claim 11, certain limitations of claims 1 and 7 are identical to those in claim 11. Therefore, the corresponding limitations of claim 11 in claims 1 and 7 are rejected for the same reasons as those in claim 11.

Regarding claim 2, Kamm discloses "the wireless data communication system apparatus as claimed in claim 1, further comprising a plurality of control points (col. 12, lines 26-30 where each MDBS has a controller in it), each of said plurality of control points being associated with one of said plurality of network access points (figure 1 where each MDBS is associated with only one cell and therefore only one access point)."

Regarding claim 5, Kamm discloses "the wireless data communication system apparatus as claimed in claim 1, further comprising:

a plurality of routers (figure 1, elements 102 and 104 where the gateways serve the same function as routers by routing data on to its respective destination, as can be seen in figure 1B with the more detailed drawing of the gateways of figure 1); and

a plurality of home agents, each of said plurality of home agents being associated with one of said plurality of routers (col. 16, lines 29-31 where the DHLR acts as the home agent and is only associated with one router or gateway)."

Regarding claims 3 and 8, Kamm discloses the apparatus of claim 2 and the apparatus of claim 7. Kamm further discloses "each of said plurality of control points is configured to control a communication between at least one of said plurality of network access points and the at least one remote user (col. 12, lines 31-35 where the act of assigning logical channels to the physical channels is an act of controlling the communication between the access point and the remote user)."

Regarding claims 4 and 9, Kamm discloses the apparatus of claim 2 and the apparatus of claim 7. Kamm further discloses "each of said plurality of control points is configured to transfer control over said at least one of the plurality of network access point to a different control point (col. 16, lines 58-col. 17, lines 1-9 where the MDBS initiates the transfer of control once the appropriate channel is decided upon)."

Regarding claim 14, Kamm discloses "a method for data flow control in a distributed data communication system, comprising:

receiving at least two network access points data intended for a remote user (col. 7, lines 4-25 where the two access points 104 and 204 both receive data intended for a remote user and process it appropriately); and

transmitting from the at least two network access points the received data to the remote user under a control of a first control point, the first control point being associated with a network access point (col. 7, lines 25-34 where the data is sent to the correct location of the remote user, which is under the control of the MDBS of the given cell)."

Although claim 18 is broader than claim 14, certain limitations of claim 18 are identical to those in claim 14. Therefore, the corresponding limitations of claim 14 in claim 18 are rejected for the same reasons as those in claim 14.

Regarding claims 15 and 19, Kamm discloses the methods of claims 14 and 18. Kamm further discloses, "...the first control point being associated with one of the at least two network access points communication with the remote user (col. 12, lines 26-30 where each MDBS has a controller in it and there is only one controller per access point, this is further illustrated in figure 1)."

Regarding claims 16 and 20, Kamm discloses the methods of claims 14 and 18. Kamm further discloses, "transferring control from the first control point to a second control point (col. 17, lines 6-9 where the control is transferred to the cell hosting the remote user, and each cell is controlled by its own MDBS)."

Regarding claim 17, Kamm discloses the method of claim 16 and "transferring control from the first control point to the second control point (col. 17, lines 6-9), the second control point being associated with one of the at least two network access points (col. 12, lines 26-30 where each MDBS has a controller in it and there is only one controller per access point, this is further illustrated in figure 1)."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamm et al. in view of La Porta et al. (U.S. Patent 6,496,505 B2).

Regarding claims 6 and 10, Kamm discloses the apparatus of claim 1 and the apparatus of claim 7. However, Kamm lacks what La Porta discloses "a plurality of foreign agents, each of said plurality of foreign agents being associated with one of said plurality of network access points (figure 20, element 610 where it is assumed that if remote user 608 has a foreign agent, then all remote users have a foreign agent which by its very nature of it being co-located with the mobile is associated with only one network access point)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the foreign agent with the apparatus of claims 1 and 7 for the purpose of forwarding messages to a remote user that is registered in a foreign cell. The motivation for using the foreign agent in the forwarding of the messages is so that remote users can roam into other cells serviced by different controllers and gateways and still be able to communicate and not have the data be negatively affected (La Porta, col. 34, lines 26-41).

Regarding claim 12, Kamm discloses "a method for data flow control in a distributed data communication system, comprising:

receiving at a router data intended for a remote user (col. 7, lines 4-25 where gateways 104 and 204 receive data intended for a remote user identified by an address)..."

However, Kamm does not explicitly disclose what La Porta does, "transmitting the received data to a foreign agent, the foreign agent being associated with a network access point (col. 34, lines 26-41 where the foreign agent is associated with a remote user that is in a foreign domain and thusly associated with a foreign access point)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the foreign agent for the purpose of forwarding messages to a remote user that is registered in a foreign cell. The motivation for using the foreign agent in the forwarding of the messages is so that remote users can roam into other cells serviced by different controllers and gateways and still be able to communicate and not have the data be negatively affected (La Porta, col. 34, lines 26-41).

Regarding claim 13, Kamm and La Porta disclose the method of claim 12. However, Kamm lacks what La Porta further discloses "providing said received data intended for the remote user to a home agent, the home agent being associated with the router (col. 34, lines 26-41 where the data is first sent to the home agent because that is where the remote user is based out of, then the home agent will forward the data to the appropriate destination)." It would have been obvious to one with ordinary skill in the art to have the data sent to a home agent for the same reasons and motivation as in claim 12.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joshua Kading
Examiner
Art Unit 2661

August 17, 2004

KENNETH VANDERPUYE
PRIMARY EXAMINER